PATENT APPLICATION
Serial No. 10/713,278
Atty. Docket No. 1155-0274P

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Art Unit 1713	:	
In re application of	:	POLAR GROUP-CONTAINING OLEFIN COPOLYMER, PROCESS FOR PREPARING THE SAME, THERMOPLASTIC RESIN COMPOSITION CONTAINING THE COPOLYMER, AND USES THEREOF
Junichi IMUTA et al	:	
Serial No. 10/713,278	:	
Filed November 17, 2003	:	
Examiner Robert D. Harlan	:	

DECLARATION UNDER 37 CFR § 1.132

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

I, Junji Saito, hereby declare as follows:

That I have graduated from master course of Osaka University in March of 1990, and been employed in Mitsui Chemicals, Inc. in April of 1990, and concerned with a development of a catalyst for olefin polymerization since 1990.

That I have read and am familiar with the above-identified patent application and the reference cited by the Examiner, i.e., Aaltonen et al., Macromolecules 1996, 29, 5255-5260.

That I carried out the following Experiments to be able to fully understand the present invention by the Examiner and believe it to be valuable.

REPORT OF EXPERIMENTS

Additional Comparative Example

In a 1000 ml glass polymerization reactor thoroughly purged with nitrogen, 400 ml of n-decane was placed, then nitrogen was passed through at a rate of 20 l/hr, and the contents were maintained at 130°C for 10 minutes. Then, 0.6 mmol of triisobutylaluminum was added, followed by further adding 0.48 mmol of undecen-1-ol (having been dried over activated alumina) represented by the following formula.

undecen-1-ol

Then, 1.100 mmol of methylaluminoxane was further added, and passing of nitrogen was stopped, followed by feeding propylene at a rate of 12.5 l/hr. Finally, a toluene slurry solution in which 0.002 mmol of dimethylsilylene(2,7-dimethyl-4,5-(2-methyl-benzo)-1-indenyl)(2,7-di-tert-butylfluorenyl)zirconium dichloride and 0.500 mmol of methylaluminoxane had been contacted at room temperature for 10 minutes was added to initiate polymerization. After the polymerization was conducted at 130°C for 1 hour at atmospheric pressure, a small amount of isobutyl alcohol was added to terminate the polymerization. Then, 100 ml of an isobutyl alcohol solution containing 1 ml of a concentrated hydrochloric acid aqueous solution was added, followed by heating at 75°C in a nitrogen atmosphere. The polymer solution obtained was introduced into a large excess of

methanol to precipitate a polymer and then vacuum dried at 80°C for 12 hours. As a result, 2.37 g of a polymer was obtained.

Properties of the resulting polar group-containing olefin copolymer are measured in the same manner as in Example 1 and are set forth below.

Composition (molar ratio) (1)/(3)	Mw	MFR (g/10min)	Mw/Mn	$T_{\alpha\beta}/T_{\alpha\alpha}$
99.5/0.5	265,000	13.7	2.6	0.20

Adhesion strength to Aluminum of the polar group-containing copolymer film (sample) obtained in Additional Comparative Example was evaluated by measuring in the same manner as in Example 1.

The result is set forth below comparing with that obtained in Example 8 wherein polymerization had been carried out in the same manner as in Additional Comparative Example, except that delta 12-tridecenol represented by the following formula was used instead of undecen-1-ol.

delta 12-tridecenol

Sample	Adhesion Strength to Aluminum
Additional Comparative Example (Carbon atom number of R^3 = 9)	2 kgf/15mm
Example 8 (Carbon atom number of R^3 = 11)	Sample Destruction

That the undersigned declares further that all statements made herein of his own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patents issuing thereon.

Date January 12, 2007 Declarer Junji Saito
[Name of Declarer]